

RECNA Newsletter

長崎大学核兵器廃絶研究センター

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A Project to Monitor “The World’s Nuclear Warheads Count”

Akira Tomizuka (Associate Professor(part-time))



Nuclear Warheads Data Poster 2014

In September 2012, RECNA launched a team to monitor the nuclear warhead count. As a part of building a database, one of RECNA's major projects, the role of this team is to analyze a variety of information about nuclear weapons stockpiles (nuclear warheads, their number, and nuclear delivery vehicles) in countries promoting nuclear armament and share that information in the form of detailed data collection. In addition to myself, the team members include Dr. Hiromichi Umebayashi (director and chairman, RECNA), Prof. Keiko Nakamura (associate professor and coordinator, RECNA), and Mr. Ichiro Yuasa (representative of the NPO, Peace Depot).

such as current plans to develop nuclear weapons and missile launch tests. There are a total of 122 footnotes to the completed database, and 207 reference documents (some duplicates).

RECNA and the PCU-Nagasaki Council presented “The World’s Nuclear Warheads Count” database and posters at a press conference on August 1, 2013. It was widely reported on.

Our work on this project made future issues apparent. Currently, estimated data that is considered reliable is heavily dependent on Mr. Hans M. Kristensen (director of the Nuclear Information Project, Federation of American Scientists). Therefore, it is necessary to understand the evaluation method Mr. Kristensen uses, but it has not been made clear, apart from a portion (based on satellite photos of the number of Russian bombers). In relation to this, literature by Dr. Igor Sutyagin (principal researcher at the Royal United Services Institute for Defense and Security Studies) regarding Russian tactical nuclear weapons suggests the necessity of reconsidering the concept of operational deployment, centralized storage, reserves, etc. in accordance with army characteristics in each country. Furthermore, RECNA is calling for the analysis and judgment of conformity to the nuclear warhead count under the New START Treaty officially announced by the governments of the United States and Russia.

On October 30, 2013, the Russian strategic command conducted a large-scale military exercise. They launched 2 ICBMs, 2 SLBMs, an anti-ballistic missile, and 4 short-range ballistic missiles. Strategic bombers were also dispatched, and 3 cruise missiles fired. These are included in the database. The exercise was truly a drill for nuclear war, and I keenly felt the danger posed by the fact that “So Many Exist Ready To Be Used.”

In addition, scandalous events have occurred one after another in the United States, such as B52 strategic bombers mistakenly equipped with 6 nuclear cruise missiles flying over the United States (2007), seventeen military officers in a unit using the “Minuteman III” ICBM being relieved from office after being deemed unfit for duty, and two commissioned officers in the same unit being investigated for suspicion of illegal drug possession (2014). We must not forget that we are living with the danger of nuclear weapons being used because of human error.

To date, published estimated data on nuclear weapons has included the “Status of World Nuclear Forces” (Federation of American Scientists), the “Nuclear Notebook” (Bulletin of the Atomic Scientists), the “SIPRI Yearbook” (Stockholm International Peace Research Institute), and the Nuclear Weapon & Nuclear Test Monitor (Peace Depot). However, those records are primarily published in English and have issues, such as providing content that is too technical, slow updates to data, and a presentation that hampers the ability to grasp the entire picture. The publications do not possess the function of a database that citizens can easily utilize.

The monitoring team met numerous times (Mr. Yuasa participated via Skype) with the aim of building a database that adheres to the following points. (1) Friendly expressions are utilized as much as possible. (2) The distinction of operational deployment/non-operational reserve stockpile is considered desirable from the perspective of ordinary citizens, rather than the conventional distinction of strategic nuclear weapons/tactical nuclear weapons. That is appropriate, given also that the concept of this distinction does not apply in countries outside of the United States and Russia. (3) In accordance with circumstances such as reduction in the United States and Russia, the database can be updated as needed and past data can be viewed. (4) Various literature and materials are scrutinized to present persuasive grounds for argument. (5) The content can provide answers for users ranging from beginners to researchers.

Since there is a significant disparity in the estimated data content and amount of information regarding nuclear warheads and nuclear delivery vehicles in each country, the team abandoned the idea of summarizing all data in the form of a uniform presentation, and instead created 3 different presentations, (1) the United States/Russia, (2) France/Britain/China, and (3) other countries. In addition, linked pages that include detailed information and simple displays through pop-ups were created for the United States/Russia, for which there is a lot of information. Furthermore, the database includes information

The Pugwash Conference Comes to Nagasaki

Susumu Shirabe (Chairperson, PCU-Nagasaki Council)



(The Author (right) with Dr. Tatsujiro Suzuki, a member of the Executive Committee of Pugwash Council (left))

The 61st Pugwash Conference will be held in Japan. Perhaps many are unfamiliar with the Pugwash Conference, which is a long-established gathering of researchers from around the globe held to deepen discussions on the total destruction of nuclear weapons, disarmament, and peace, and present proposals to countries around the world.

In 1945, atomic bombs were dropped on Hiroshima and Nagasaki. Although the Pacific War ended, the era of the Cold War was ushered in, and conversely the nuclear arms race advanced around the world.

Concerned with this situation, and spurred by the 1954 Bikini Atoll nuclear test and radiation exposure suffered by the Daigo Fukuryu Maru, the philosopher Sir Bertrand Russell drafted a manifesto that aimed to abolish nuclear weapons in an effort to seek peace. He petitioned the physicist, Dr. Albert Einstein to sign it.

Dr. Albert Einstein signed it just days before his death, and having received his signature, Sir Russell released the manifesto to the world in 1955. This was called the Russell-Einstein Manifesto.

The Russell-Einstein Manifesto called for an international conference of scientists for the survival of humankind. This was realized in 1955 when a Canadian businessman, impressed by the Russell-Einstein Manifesto presented by Nobel Prize-winning scientists, invited the scientists to his summer home in the small fishing village of Pugwash, which is located in the east coast of Canada in Nova Scotia. This was the first Pugwash Conference. From Japan, Dr. Hideki Yukawa, Dr. Shin'ichiro Tomonaga, and Dr. Iwao Ogawa participated. Since then, the conference has been held once or twice a year in various locations around the world.

In Japan, the 45th Pugwash Conference was held for seven days in July 1995 at Hiroshima under the theme, "Towards a Nuclear Weapon-Free World." Immediately following this conference, the Nobel Peace Prize was awarded to the Pugwash Conference and the then chairman of the Pugwash Conference, Dr. Joseph Rotblat.

Sixty years after the atomic bombs were dropped on Hiroshima and Nagasaki, the 55th Pugwash Conference was held in Hiroshima in 2005 from July 23rd-27th under the theme, "60 Years After Hiroshima and Nagasaki." Over those five days, lively debates were held on

peace and the abolition of nuclear weapons, and on the final day of the conference the "Hiroshima Declaration of the Pugwash Council" was presented.

Last year, the 60th Pugwash Conference was held in Istanbul, Turkey from November 1st-5th. During the conference, a session was held on the Fukushima nuclear accident, and with a referral from the International Pugwash Council, I introduced efforts in Fukushima carried out by Nagasaki University and reported on the current situation regarding damage to health following the earthquake in Fukushima.

Given that this conference was held in a corner of the Middle East in Istanbul, which was once called the powder keg of the world, there was a tense atmosphere amid the calm gathering of researchers that contrasted with international conferences I normally participate in. Perhaps it stemmed from anticipation of the power of communication the Pugwash Conference possesses. The meeting was held with the participation of the Turkish president and foreign minister, and passionate discussions continued from early morning until late at night.

I was especially impressed by the continuation of a panel discussion where specialists and politicians from the countries of Iran and Turkey, Israel and Palestine, and India and Pakistan, which are presently at opposition to one another in international politics, sat at the same table and exchanged opinions. In particular, the panel discussion in which the foreign ministers from Iran and Turkey participated led to the groundbreaking diplomatic achievement of both countries expressing the will to cooperate in abolishing weapons of mass destruction in the Middle East.

In this way, scientists from around the world establish a place for talks that go beyond confrontation. I sensed the heritage of the Pugwash Conferences in the frank exchange of ideas that took place in an unofficial capacity among experts, including high-ranking government officials.

The Pugwash Conference still retains its importance even 68 years after the war. In the watershed year marking 70 years since the bombing of Hiroshima and Nagasaki, the decision was made to hold the conference in Japan as suggested by some.

It is my hope that we succeed in holding the Pugwash Conference in Nagasaki and sharing a detailed proposal on the total abolition of nuclear weapons with the world.

To realize this, the PCU-Nagasaki Council will call on all of Nagasaki, including Nagasaki University, Nagasaki City, and Nagasaki Prefecture, to embark on endeavors aimed at holding the conference.

Passing On the Atomic Bomb Experience & the Total Abolition of Nuclear Weapons

Makoto Takayama (Visiting researcher, RECNA)

In the fall of 2013, the visiting researchers at the Research Center for Nuclear Weapons Abolition (RECNA), Dr. Chie Shijo and I became coordinators and held a series of workshops under the theme, "How to Talk About the Bombing of Nagasaki." The presenters were Mr.

Shunji Inoue, a lecturer at the NHK Culture Center (October 29th), Dr. Shijo (November 26th), and myself (November 27th).

During those 3 days, lively discussions were held on the topic of speaking about the atomic bombing in relation to issues in media,

history, and recollections. Researchers involved in the total abolition of nuclear weapons asked questions to researchers involved in researching atomic bomb victims regarding each of the reports. The conversations between them were an attempt to approach the weighty theme given to this report, “passing on the atomic bomb experience and the total abolition of nuclear weapons.”

Mr. Inoue, who has for many years been in charge of producing programs for NHK (Japan Broadcasting Association), spoke about creating a documentary on prisoners of the old Japanese army who became bombing survivors in Nagasaki. Few realize that during the war Dutch soldiers were held prisoner in Nagasaki. This film encompasses the impact of an unknown past and emotional exchanges between the program producer, Mr. Inoue and the bombing survivors living in the Netherlands, and stirs emotions in the viewers. The film asks how we can understand the feelings and perspectives of the bombing victims who suffered in Nagasaki as Dutch soldiers.

The exchanges between Mr. Inoue and the bombing survivors living in the Netherlands also suggest that the practice of creating a documentary hinges on the act of conducting interviews. The activity, which is representative of a past mediated by double and triple colonialism, together with research of written materials, shares many similarities with the practice of oral history. Questions were asked about Mr. Inoue’s report regarding the location of materials on Dutch bombing victims, and differences in the perceptions of imprisoned bombing victims and historical awareness of bombing victims associated with Japan’s invasion of Asia.

In contrast to the transnational aspect of the atomic bomb devastation on which Mr. Inoue’s report focused, Dr. Shijo’s report concentrated on local stories from Urakami, a place in Nagasaki where the atomic bomb was dropped and has been well known for its long Catholic tradition, rooted in painstaking document research and interviews. With the question in mind of “why stories of the atomic bombing in Urakami during the Occupation predominantly involve the view advanced by Dr. Takashi Nagai*1 that the victims of the atomic bomb were “hansai” (burnt offerings), the report examined the methods of historical narrative theory and the utility of considering Urakami in comparison to Hiroshima. Dr. Shijo reviewed Dr. Nagai’s life and previous work on the “hansai” theory of burnt offerings.

Based on the significant impact of Dr. Nagai’s ideas, the fact that focus is not placed on stories of Catholic believers in Urakami, and that the acceptance of those ideas has not been examined, Dr. Shijo focused on the word, “rift.” Because of suspicion and feelings of indebtedness toward selfish acts in an extreme situation, the “rift” that opened up between neighbors is understood to be a “rift” in the Catholic community of Urakami, and the focus is placed on “the atomic bombing as divine punishment,” with an eye on “statements from people from the old town.” The examination of these stories was linked to issues in restoring Urakami, indicating a tendency to consider stories of Urakami as a power to rebuild an individual’s identity within the group. In regard to Dr. Shijo’s report, questions were asked about the relation

to previous research on atomic bomb victims, the relationship between the view on atomic bombs in a country that has been bombed and stories of Urakami, as well as questions regarding handling of data.

My report looked at issues of harm pointed out by Mr. Inoue, and stories of bombing survivors concerning “communication to the next generation” that encompass problems in local stories indicated by Dr. Shijo. Specifically, the report detailed research on life-story interviews with Nagasaki bombing victims that has been ongoing since 2005, with the basic theme being the representation of, and passing on of, unspeakable experiences. Focusing on differences in perspectives of “communication to the next generation” that arise in stories told by the living through storytelling, the report examined the relationship between the power of discourse (distance from the epicenter, degree of acceptance of peace education) and individual stories to discover the possibility of passing on stories produced from this reality to “become a Hibakusya.”

My report prompted comments on encountering “bombing survivors” rooted in life experiences and questions regarding the perspectives on bombing held by “those who have experienced it” and “those who have not.” The former comments simulate the research experiences and path of the speaker, and the latter question is attributable to the difference in perceptions between positivism and constructionism. My report took the fundamental stand of constructionism that questions anew the very framework of perceptions held by “those who have experienced it/those who have not.” Given the lack of discourse by bombing victims on their experiences, (in terms of constructionism) speaking of oneself is unsettling to the self-evident category of bombing victim (empirical). Within the rent in this category lies the potential to “become a Hibakusya.”

Furthermore, the 16th meeting in the continuing series of RECNA meetings presented an opportunity to meet Dr. Yuki Miyamoto from DePaul University in Chicago, and under the theme, “Nuclear Stories and Dissecting Myths in the Nuclear Age,” examined the problems introduced here from the standpoint of ethics, which is Dr. Miyamoto’s area of expertise.

In anticipation of the 70th anniversary of the atomic bombing next year, RECNA is beginning to conceive a new project addressing how to continue passing on the stories of the atomic bombing survivors.

*1 Dr. Takashi Nagai was a faculty of Nagasaki Medical University (now Nagasaki University) and A-Bomb survivor who lost his wife by A-bomb. He is well known for his Catholic faith and he wrote many books and articles on A-bomb both in fields of medical science and literature.

Report: Participating in the Nayarit Conference on the Inhumanity of Nuclear Weapons

Keiko Nakamura (RECNA Associate Professor)

The Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean was entered into on February 14, 1967, marking the creation of the first nuclear-weapon-free zone in a populated area. Against the backdrop of the Cuban Missile Crisis, which brought us to the brink of a nuclear missile launch, this regional effort toward complete elimination of nuclear weapons can truly be said to have paved the way for a comprehensive approach from non-nuclear-weapon state leaders that aims to realize a “world free from nuclear weapons.” Forty-seven years later, those same governments held an international conference in Nayarit, Mexico on the theme of the inhumanity of nuclear weapons from February 13th–14th this year. That conference underlined the fact that calls for such a comprehensive

approach are gaining ground in the international community, and it once again gave a strong impression of the heavy responsibility of non-nuclear-weapon states that continue to rely on nuclear weapons, such as Japan.

The official title of the meeting was the Second International Conference on the Humanitarian Impact of Nuclear Weapons. With the aim of globally sharing scientific and objective information on the impact of the use of nuclear weapons, this conference was positioned as a follow up to the international meeting held by the government of Norway in March last year. In addition to representatives from 146

governments, the conference was attended by representatives of international organizations including the United Nations and the International Committee of the Red Cross, as well as many civic communities (out of the nations possessing nuclear arms, 5 nuclear-weapon states, Israel, and North Korea were not in attendance). RECNA received an invitation from the Mexican government as an academic institute, and I participated.

To summarize the Nayarit meeting, I will present two elements that I think impacted the overall course of the discussions. First, at the start of the conference there was a 1 hour and 45 minute session on “the testimony of atomic bomb victims,” which was the outcome of efforts by NGOs. Mr. Yasuaki Yamashita and four other victims of the Nagasaki bombing now living in Mexico each spoke about their experience and emotions, painting a picture for the participants of the calamity of Hiroshima and Nagasaki, which is ground zero for discussions on inhumanity.

In addition, an important element was an announcement made on the morning of the first day of the conference. The Austrian government revealed that the third conference is to be held in Austria in the latter half of this year. This announcement enabled the various government representatives to hold discussions in anticipation of what should be addressed next, particularly in the exchange of ideas during the final session. I would like to readdress this point.

During the four working sessions, Dr. Masao Tomonaga, Director of The Japanese Red Cross Nagasaki Genbaku Hospital (RECNA visiting professor) and other experts took to the podium, and multifaceted discussions were held on the global and long-term result that the detonation of nuclear weapons would have on issues including public health, humanitarian aid, the economy, the environment, climate change, and food security. As a new perspective not touched on during the Oslo conference, I would especially like to focus on the scrutiny placed on the risk of accidental use of nuclear weapons. Panelists presented occurrences of accidents and incidences where nuclear weapons were on the verge of being used, indicating the heightened danger of nuclear weapons being launched because of factors such as vulnerabilities in command control systems, human error, elevated vigilance, and nuclear terrorism. The catchphrase, “So Many Exist Ready To Be Used” printed on RECNA posters showing “The World’s Nuclear Warheads Count” is not just a slogan. We must realize anew

that it is a fact supported by scientific data.

During the exchange of ideas in the session presided over by Mexico and Austria, both governments made comments one after another, significantly running over the scheduled session time. The remarks were primarily appeals for the necessity of moving toward nuclear weapon prohibition based on an argument of inhumanity. On the other hand, countries dependent on nuclear weapons such as Japan, Australia, and NATO member nations expressed a negative stance as in the past, asserting that “actions should be based on the reality of security guarantees.”

Finally, the Undersecretary for Foreign Affairs Juan Manuel Gomez-Robledo of Mexico presented the Chair’s summary (a full Japanese translation is available on the RECNA database). The summary expressed the viewpoint that, just as with other weapons, the process of first banning and then disposing of them is the path to achieving a “world free from nuclear weapons,” and the current discussion on the inhumanity of nuclear weapons should be linked to “achieving a new global standard and model through the conclusion of treaties that have legally binding power.” The summary also stated that the time had come to begin “the diplomatic process that will contribute to this aim,” including the examination of “specific time frames,” “the definition of optimum venues for discussion,” and “clear and substantive frameworks.”

The Chair’s closing summary was simply a personal summation that possesses no binding power. Nevertheless, it can be said that it showed the extraordinary will of the Mexican government to call for the promotion of substantive arguments for the prohibition of nuclear weapons in the next conference to be held within the year. On the other hand, at this point the Japanese government has yet to clarify its stance, including whether it will participate, saying, “Japan needs to consider what response to take” (from the homepage of the Ministry of Foreign Affairs, speaking on a summary of the conference). Discussions on inhumanity continue to have an important aspect that impact the international mood toward Hiroshima/Nagasaki Atomic-bomb Day, The First Committee of the UN General Assembly, the conference in Australia, and the 2015 NPT Review Conference. We will closely observe actions taken in the future.

Nagasaki Youth Delegation

Towards a Building New Bridges Between Heiden and Nagasaki

Kenichi Ejima (6th year, Nagasaki University School of Medicine)



(The Author and Ms. Maekawa presenting a message from the Heiden meeting to Mayor Taue of Nagasaki, 4 November 2013, at the conference hall of Nagasaki Atomic Bomb Museum)

We were honored to receive an invitation to the international conference (sponsored by the Swiss Red cross, etc.), the “Swiss Youth Bans the Bomb” (10/31–11/1, 2013), which was held in the town of Heiden in Switzerland. Ms. Haruka Maekawa (3rd year, Nagasaki University Faculty of Economics) and I participated from Nagasaki. In the spring of 2013, the Nagasaki Youth Delegation was presented with

the opportunity to visit the United Nations Office in Geneva, Switzerland and give a presentation on activities carried out prior to departure and after returning to Japan.

The activities of the Nagasaki Youth Delegation are a large part of the reason young adults from Nagasaki were extended an invitation. There is also a very strong link between Nagasaki and Heiden, where

Henri Dunant, the founder of the Red Cross spent his last years.

In 2009, a replica of the Peace Bell of Nagasaki was presented by medical department volunteers to the Henri Dunant Museum in Heiden. This came about because 3 years earlier the museum directly asked Prof. Yamashita, then assigned to WHO headquarters in Geneva, for the Peace Bell of Nagasaki to be donated as a symbol of desire for peace and to commemorate the 100th year of Henri Dunan’s death, observed in 2010.

Volunteer medical students agreed with that objective, contributions were solicited, and the Peace Bell of Nagasaki was created and gifted as a symbol of recovery from the atomic bomb disaster and a bell of peace. That bell is rung every year on August 9th and special occasions in the far-away town of Heiden.

At the conference, workshops for high school students and university students were simultaneously carried out. There were approximately 30 high school students and 50 university students that participated. Many of the students knew little about nuclear weapons. Even so, we were surprised to see that many were interested and gathered from all over Switzerland. We primarily participated in the workshops for university students. At the conference, the university students took the view that action should be taken to prohibit banks from investing in companies that manufacture nuclear weapons. We thought highly of their strong awareness of the issues and clear vision.

One aspect was memorable. We gave our presentation and realized there was not a single person among the 50 university students who knew the word "hibakusha", atomic bomb survivors. Though some may think that the atomic bomb survivors' stories being told by our generation lacks validity, we think we should continue to share their stories in creative ways.

In addition, at the end of the conference, we received a letter addressed to the mayor of Nagasaki from the students who held the conference, and were able to hand it to the mayor in person at the

closing ceremony for The 5th Nagasaki Global Citizens' Assembly for the Elimination of Nuclear Weapons, which was held soon after.

We met new young friends taking action in Switzerland and reunited with young friends we met in Geneva. It is encouraging to have partners who are working hard toward the same goals. Just as our counterparts are, we youth of Nagasaki also hope to continue taking action as only we can.

New Staff

Vice Director, Professor



SUZUKI, Tatsujiro

Born in 1951. Before joining RECNA, he was a Vice Chairman of Japan Atomic Energy Commission (JAEC) of the Cabinet office (2010-2014). He is also a Council Member of Pugwash Conferences on Science and World Affairs (2007-09 and from 2014~). Dr. Suzuki has a PhD in nuclear engineering from Tokyo University (1988).

Visiting Professor

Steven Lloyd Leeper



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RECNA Newsletter

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Establishment of a "Northeast Asia Nuclear Weapon-Free Zone" Taken up as an Issue by the United Nations

Hiromichi Umebayashi (RECNA Director)

The question of how universities and other research institutions can contribute to the establishment of a Northeast Asia Nuclear Weapon-Free Zone (NEA-NWFZ) has been a central theme at RECNA since our founding. Now an important development suggests that our efforts in this regard may be repaid to some extent. In July 2013, the NEA-NWFZ was, for the first time in history, officially taken up as a topic by the United Nations.

On July 26, 2013, the Secretary-General of the United Nations delivered the 2013 activity report on the work of the Advisory Board on Disarmament Matters to the UN General Assembly (A/68/206). According to this report, the Advisory Board on Disarmament Matters made five recommendations to the Secretary-General regarding NWFZs, and four recommendations regarding so-called robot weapons or autonomous weapon systems. The regions specifically named in the recommendation regarding NWFZs were the Middle East, Northeast Asia, and South Asia. This was the very first time that the NEA-NWFZ was officially singled out as an issue for the United Nations.

The specific language used in the recommendation regarding North-east Asia was as follows :

"The Secretary-General should also consider appropriate action for the establishment of a nuclear-weapon-free zone in North-East Asia, including by promoting a more active role for the regional forums in encouraging transparency and confidence-building among the countries of the region."

In other words, the Board was recommending that the United Nations to take "appropriate action," and more specifically, that this start by creating a forum for confidence-building that would bring together the countries concerned. Various forums at different levels in which the relevant parties from the countries concerned could engage in an unreserved exchange of views on this topic, would certainly contribute to promote the process of confidence-building. From our point of view at the university researcher level, we also may participate and strengthen the process by organizing such a forum at academic level with the involvement of the United Nations with favorable atmosphere. RECNA has already been engaged in discussion of the framework for forming a think tank on the pattern of an international network to address comprehensive approaches to the NEA-NWFZ. Such an academic network could indeed be expected to contribute to the formation of a forum for confidence-building. The workshop which was held in Tokyo in last September was also situated as part of this movement. The Japan-Korea Researchers Caucus, in particular, which was taken place at that workshop, was conceived as a starting point for development intended to involve a broader range of international researchers, and it may become possible to invite United Nations involvement in it.

Meanwhile, it is also essential to bear in mind that the discussion resulting in the above recommendation by the Advisory Board on Disarmament Matters was not by any means optimistic in tone.

According to the report, one council member stated that in order to establish a new zone such as a NEA-NWFZ, "there should not be any serious security concerns among the States concerned," and there should be "a minimum level of confidence." The report stated that, "Therefore, the creation of such a zone in North-East Asia was deemed difficult."

It is probably because of this background that the recommendation emphasizes the role to be played by the United Nations in confidence-building. Elsewhere in the report are recorded such statements as: "...the need for constructive dialogue and confidence-building as necessary steps for the development of future zones in the Middle East and North-East Asia was emphasized." "The positive role that regional forums could play to promote the establishment of a zone in North-East Asia was mentioned by another Board member."

However, discussion that places emphasis on an environment that poses difficulties for regional security is something that we have come in contact with many, many times already. Of those regions named in the discussion, the one with the most problematic environment is probably the Middle East, and the Middle East is where international, multilateral discussion for the formation of a zone free of nuclear weapons and other weapons of mass destruction has made the most progress. This point alone suggests that parties debating whether a peaceful environment should come first or a nuclear weapon-free zone should come first must not fall into deterministic positions based on the given environments. The point to emphasize here is that the proposal for a NWFZ in the Northeast Asia of today functions as an inducement to develop an environment of peace.

When we learned of the Advisory Board's recommendations, President Tsakhia Elbegdorj of Mongolia had already made the following penetrating remarks to the General Assembly in light of those recommendations:

"Mongolia is prepared, on an informal basis, to work with the countries of Northeast Asia to see if and how a nuclear weapon-free zone could be established in the region. Though we know well that that would not be easy and would require courage, political will and perseverance, it is doable, if not right away." (High-level Meeting on Nuclear Disarmament, September 26, 2013)

Note: The original texts and Japanese translations of the "Recommendation by the UN Advisory Board on Disarmament Matters" and of the "President of Mongolia at the High-Level Meeting on Nuclear Disarmament" are available in the RECNA citizen's database.

"Denuclearization of Northeast Asia and of the World" the 3rd Workshop Held in Tokyo

Hiromichi Umebayashi (RECNA Director)



The participants of the 3rd Workshop at Meiji Gakuin University, Shirokane campus
15 September 2014

The research project on "Developing a Comprehensive Approach to a Northeast Asia Nuclear Weapon-Free Zone (NEA-NWFZ)" that RECNA has been engaged in since its establishment in 2012 culminated with the project's third workshop, which was held September 14-16 2014 in Tokyo.

This also served as a celebration of the first International Day for the Total Elimination of Nuclear Weapons, which was to be held on September 26 as declared by the UN General Assembly. The workshop took place at two locations, the Grand Prince Hotel New Takanawa and the Shirokane campus of Meiji Gakuin University.

A consistent theme throughout the workshop sessions was the multifaceted examination of the proposal by Dr. Morton Halperin (Open Society Institute in the United States, and former Special Assistant to

the President of the USA) that the objective of establishing a NEA-NWFZ be positioned as one element of the Comprehensive Agreement on Peace and Security in Northeast Asia. Such an agreement would simultaneously resolve this and a number of closely related issues. Given this orientation, the workshop yielded formulations of objectives like the following:

- In the 70th anniversary year of the atomic bombing, and in advance of the NPT Review Conference in 2015, examine the relationship between establishment of a NEA-NWFZ and global nuclear disarmament.
- Share topics and awareness of issues with informed people and researchers who are directly or indirectly involved in formulating Japan's policies.
- Exchange topics and awareness of issues with researchers and policymakers in Japan and South Korea, and develop upcoming joint initiatives.
- In light of the recommendation by the UN Advisory Board on Disarmament Matters to the Secretary-General that the United Nations contribute to establishment of a NEA-NWFZ, expand research cooperation with the United Nations.

Given objectives of these kinds, the following steps were taken with regard to the form and content of the workshop:

- Dr. Jayantha Dhanapala, former United Nations Under-Secretary-General and Chair of the NPT Review and Extension Conference of 1995, was invited to be the keynote speaker.
- Dr. Halperin, Dr. Peter Hayes, Dr. Kiho Yi, Amb. Jargalsaikhan Enkhsaikhan, and others who have been engaging in joint research on comprehensive approaches to achieving a NEA-NWFZ were invited as continuing core members.
- Obtaining the cooperation of the Ministry of Foreign Affairs (MOFA), Japanese government policymakers and senior specialists were invited to the workshop and a meeting for exchange of views with Dr. Halperin and other researchers from outside Japan was also held at MOFA. Diet members Hon. Keisuke Suzuki (Liberal Democratic Party), Hon. Natsuo Yamaguchi (Komeito), and Hon. Katsuya Okada (Democratic Party of Japan) made statements relating to workshop themes.
- Eight researchers from South Korea were invited to the work-

shop. The Japan-Korea Researchers Caucus also held a meeting and discussed future joint research between Japan and South Korea. Two members of the South Korean National Assembly were invited to attend from the Parliamentarians for Nuclear Non-Proliferation and Disarmament (PNND) Republic of Korea Section, as well, and the opportunity was taken to have an exchange of views in the forum for Diet members held by the PNND Japan Section.

- In addition to obtaining the cooperation of the United Nations Information Centre, we also gained the participation of Mr. Valere Mantels, Senior Political Affairs Officer in the Weapons of Mass Destruction Branch of the United Office for Disarmament Affairs.

The following will recapitulate some noteworthy points from the discussions that took place during these events.

Dr. Halperin, in his presentation, emphasized the need for the Japanese government to initiate action now regarding the NEA-NWFZ, and the benefits of doing so. The fact that the workshop venue was in Tokyo no doubt had some part in this, but as he himself has pointed out, the perception of the current situation in Washington makes it difficult to create movement in the US government. Nevertheless, Dr. Halperin remains unchanged in his conviction that the denuclearization of North Korea is crucial both for the stability of East Asia and for the global non-proliferation regime. In that case, the government of some one of the countries involved will have to initiate action, and according to his analysis, right now that country is Japan.

Dr. Dhanapala related his position on the significance of NWFZs, giving the listeners a sense of the depth of his insight and the magnitude of his experience. As a result of the expansion of NWFZs, the locations where nuclear weapons can be deployed have been growing more limited, and Dr. Dhanapala pointed out the effect this has had in imposing constraints on the strategic concepts of the nuclear weapon states. He also explained that although NWFZs have not eliminated regional conflicts nor brought about general and complete disarmament, the NWFZs have been creating a foundation for the proliferation of peace and establishing the right of humankind to live in a nuclear-free world.

The workshop was characterized by repeated discussion of NWFZs and extended nuclear deterrence, or the "nuclear umbrella." This is to be expected given the theme of the NEA-NWFZ, in which Japan and South Korea are central. However, the discussion also indicates that this issue is on the new front of theoretical debate regarding the NWFZ. Dr. Dhanapala stated that "extended nuclear deterrence and a NWFZ are not compatible," and Mr. Mantels stated that "it is not productive to create a zone in which signatory nations continue to depend on extended nuclear deterrent force." There was a distinct impression that the cumulative weight of discussions on the part of persons connected with the UN lay in this direction of incompatibility of NWFZ and "nuclear umbrella". On first hearing, this may seem to be inconsistent with the argument Halperin used to persuade Japanese and South Korean policymakers in which he stressed the compatibility of NWFZ and existing security treaties with the United States. Under more precise examination, however, it is apparent that such is not the case, and this seems likely to become one of the important issues on which RECNA should make a contribution toward logical construction to reconcile these opinions.

2014 Nagasaki Peace Declaration : Where Japan shall stand?

Satoshi Hirose (RECNA Vice Director)

As was the case in 2013, the Nagasaki Peace Declaration that was announced on August 9 in 2014 included specific content in response to the recent developments inside Japan and overseas. Firstly, regarding the inhumanity of nuclear weapons, and the results of the Nayarit Conference, the declaration pointed out that the damage caused by nuclear explosions is wide-ranging, affecting the economy, environment and climate, and once again reiterated these dangers.

In addition to this, another noteworthy point of the declaration is the way that it makes a positive appeal not only to the nuclear weapon states but also to those states such as Japan that are in alliance with them and follow a security policy of sheltering under the so-called "nuclear umbrella." This is of course clearly a reference in consideration of the Japanese government's principle of adhering to the policy of dependence upon the United States' nuclear deterrents, but it can also surely be seen as reflecting the debate about what role the non-nuclear weapon states under the nuclear umbrella should be playing in order to abolish nuclear weapons, a debate that is becoming more prominent in the current international society. Hitherto in international society, because of the conflicting opinions of the nuclear weapon states who believe in the nuclear deterrent and the non-aligned states who strongly urge the encouragement of nuclear disarmament, the states who have relations with the nuclear weapon states have had to fall in line behind the nuclear weapon states, and have not been able to make their presence felt. However, the fact is that the opinion that the states under the nuclear umbrella should newly examine what role they can play in nuclear disarmament and whether they should play such a role is being more widely voiced on an international basis. This raises for Japan – a country that while it sits under the nuclear umbrella is also at the same time the only war victim of atomic bombs – enormously important questions.

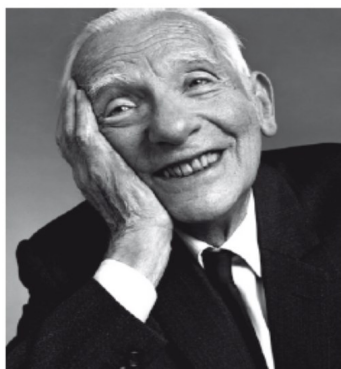
In answer to these questions, endlessly reciting the so-called "argument base on the realism" that Japan has no choice but to rely on the United States' nuclear arms and their deterrence in the face of the threatening reality surrounding Japan can only be described as inflexible and unimaginative. If that really is the case then one might just as well say that the states under the nuclear umbrella have no choice but to keep quiet and submit to the present state of affairs. Without an inkling of their own volition or prospects for the future,

states can hardly be expected to make their presence felt in the international society. If Japan wishes to earn an honorable status within the international society it should put forward a vision that is crystal-clear and that can earn the empathy of other states, and then work towards the realization of that vision, not just with words, but by showing a stance of persistent effort. Regrettably, in present day Japan, while the notion of peace is espoused as Japan is the only country to have experienced a nuclear attack, when it comes to the debate about abolishing nuclear weapons we have for many years timidly cowered behind the shield of the "argument base on the realism." The Peace Declaration can be described as a cry to spur on this timorous Japan from the atomic bombing site of Nagasaki, a cry that contains a degree of frustration and irritation.

The year 2015 marks the 70th anniversary of the nuclear attacks, and from now on the opportunities we have to hear the actual voices of the survivors will become more and more infrequent. From now on the age group who are the children of a generation that has experienced neither exposure to nuclear weapons nor war itself will take on the role of seeking the abolition of nuclear weapons, and the expectations towards this young generation are incorporated in the declaration. Handing down to future generations the actual experience of "hibaku," exposure to nuclear weapons, will now become extraordinarily difficult. It is for this very reason that the unshakeable vision of "the abolition of nuclear weapons" must be established as a bond that ties together people and goes beyond the bounds of generation or nationality. The genuine "argument base on the realism" does not consist of shrugging one's shoulders and unquestioningly submitting to the current state of affairs. Having thoroughly grasped the present circumstances and made a fresh starting point from there, moving on to try to improve the situation and push it towards the ideal state of affairs is the "realism" in its truest sense. I hope that it will be the 2014 Nagasaki Peace declaration that becomes the herald of a new "realism" against nuclear weapons in Japan.

The Social Responsibility of Scientists and the Nuclear Issue

Tatsujiro Suzuki (RECNA Vice Director)



Sir Joseph Rotblat (1908–2005)
adapted from <http://fissilematerials.org>

My field of specialization is nuclear energy and non-proliferation policy, and within this field the plutonium issue in particular could be described as my life work and a never-ending theme. My first encounter with plutonium was in 1977 when I was studying in the U.S. and President Jimmy Carter announced a stunning nuclear non-proliferation policy. Ever since those days my central research theme has been the nuclear fuel cycle that uses plutonium as its fuel

and the nuclear issue. In fact, it was from that time that I always describe plutonium as "the nuclear material used in the Nagasaki atomic bomb", which consequently also kept Nagasaki in my mind from that time. I regard the stroke of luck that I was recently appointed as a professor at Nagasaki University as being highly providential, and I am about to start my research work in earnest.

One other activity that could be described as being part of my life work is the action I have made on behalf of an organization comprising scientists seeking the eradication of nuclear weapons and war, called the Pugwash Conferences on Science and World Affairs. Dr. Susumu Shirabe, a RECNA and Nagasaki University Trustee, provided an introduction to the organization in the previous newsletter (Vol. 3 No. 1, August 2014), so in this article I would like to tell readers about the late Sir Joseph Rotblat, who was awarded the Nobel Peace Prize in 1995 for his work over many years at the center of the Pugwash Conferences, ever since the organization was founded. Dr. Rotblat was a Polish émigré and scientist who participated in the Manhattan Project. He is known as the only scientist who withdrew from the project when he learned that the German's efforts to develop nuclear weapons had failed and he felt that there was no longer any point in continuing with the development of these weapons. This episode in his life alone demonstrates his integrity and strength as a human being, and this ethos is still a vital pillar of the Pugwash Conferences and its work as the "social responsibility of scientists," a theme that continues to be of the utmost relevance in the present day and age.

The time that I was able to talk in person with Dr. Rotblat is something that I still cherish as an asset in my heart. In the hope of turning this asset, to some extent, into a reality, I started a Peace Pledge Movement for Scientists in Japan in 1999. This movement did not

seek to elicit signatures for petitions against nuclear weapons; it was a movement to ask individual scientists/engineers to pledge not to be involved in any activities (research, development, production and usage) of nuclear weapons as well as other weapons of mass destruction. I set up the volunteer body Peace Pledge Japan in the hope of obtaining the promises of many experts and members of the public, but the movement broke down in the space of a few years. One of the major factors behind this was that in a nation with a strong group culture like Japan there are many people who feel uncomfortable with the concept of making "personal promises," moreover, I was shocked to discover that many researchers and specialists felt that as a member of a group or organization if that group decided to go ahead with nuclear weapons development they would have no choice but to acquiesce. The Japanese culture that sees faithfulness to the group as being more important than individual social responsibility may of course have its good aspects, but as you can see there is also a worrying side to it.

The event that made me feel this worrying side most acutely was the accident at the Fukushima No.1 nuclear power plant on March 11, 2011. The background to this accident was the problem of the sense that nuclear power experts in Japan had refrained from research or comments on safety out of consideration to the power industry. The Atomic Energy Society of Japan (AESJ) has a splendid Code of Ethics. Section 4-10 of its Action Manual states: "When necessary, securing the safety of the public through the disclosure of information will take precedence, even if that information constitutes a violation of the obligation for confidentiality." However, respecting the code of ethics is ultimately a personal, individual decision. When that aware-

ness amongst scientists becomes weak just how severe is the impact upon society! Surely "social responsibility" is a question of constantly maintaining an awareness of the size of that impact. I should point out that the Code of Ethics of the AESJ states, with regard to the limits of peaceful use of nuclear power: "The use of nuclear power is limited to peaceful purposes. As a matter of their dignity and honor, members of the Society shall in no way participate in research, development, manufacture, acquisition or use of nuclear weapons." (Section 2-2 of the Action Manual.) This point is rather unusual among such academic societies across the world, and is a little-known fact. Nuclear specialists must respect these guidelines and promote them throughout the world.

Having experienced the Fukushima accident my feelings as an expert towards social responsibility have grown even stronger. I said in the mail magazine when I resigned from the Atomic Energy Commission: "In addition to rationality, policies must not forget humanity and must be compassionate, otherwise they will never gain the trust of society." I think that this is a message that can also be applied to policies concerning nuclear non-proliferation and the abolition of nuclear weapons. I would like to conclude this article with the following words from the Russell-Einstein Manifesto, which is at the roots of the Pugwash Conferences: Remember Humanity, Forget the Rest.

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